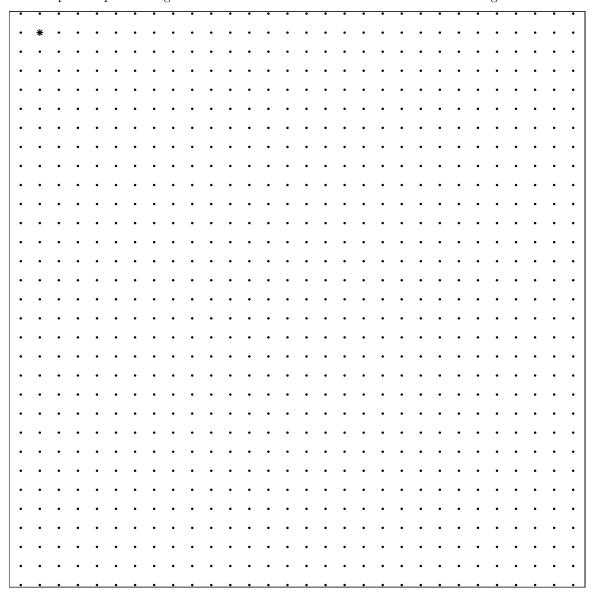
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## Grid Countdown Spirals

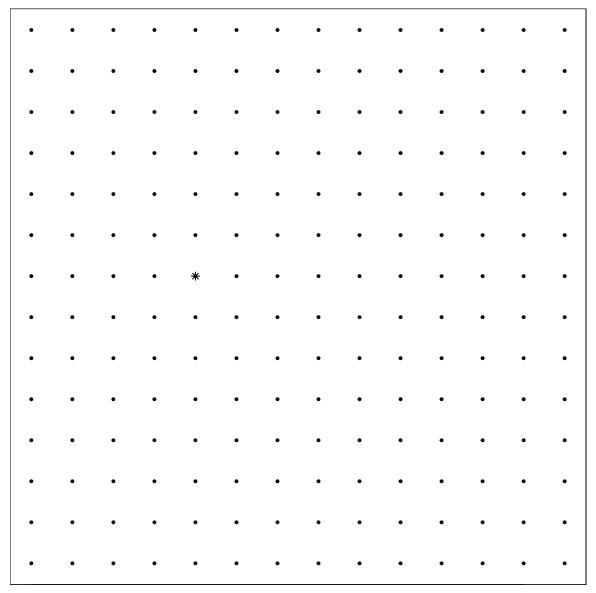
Follow the teacher! Use a ruler!

- 1. Start at the star.
- 2. Go down 4 units.
- 3. Go right 3 units.
- 4. Go up 2 units.
- 5. Go left 1 unit.
- 6. Repeat steps 2 through 5... Notice a  $90^{\circ}$  turn counterclockwise after each segment.



Repeatedly count backwards from 5 for distance, turning  $90^{\circ}$  counterclockwise after each segment. Remember... Down, Right, Up, Left!

- 1. Start at the star, heading down.
- 2. Move 5 and then turn  $90^{\circ}$  counterclockwise.
- 3. Move 4 and then turn  $90^{\circ}$  counterclockwise.
- 4. Move 3 and then turn  $90^\circ$  counterclockwise.
- 5. Move 2 and then turn  $90^\circ$  counterclockwise.
- 6. Move 1 and then turn  $90^{\circ}$  counterclockwise.
- 7. Repeat steps 2 through 6.

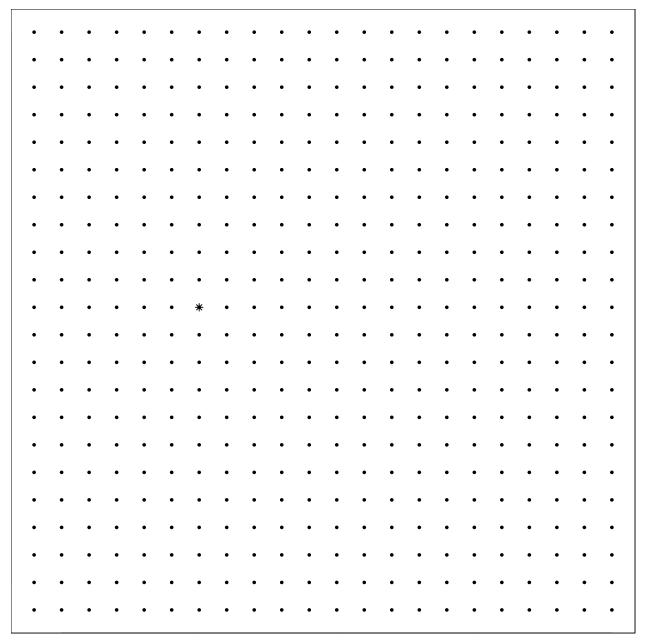


Repeatedly count backwards from 6 for distance, turning  $90^{\circ}$  after each segment. Remember... Down, Right, Up, Left!

- 1. Start at the star, heading down.
- 2. Move 6 and then turn  $90^{\circ}$  counterclockwise.
- 3. Move 5 and then turn  $90^{\circ}$  counterclockwise.
- 4. Move 4 and then turn 90° counterclockwise.
- 5. Move 3 and then turn  $90^{\circ}$  counterclockwise.
- 6. Move 2 and then turn 90° counterclockwise.
- 7. Move 1 and then turn  $90^{\circ}$  counterclockwise.
- 8. Repeat steps 2 through 7.

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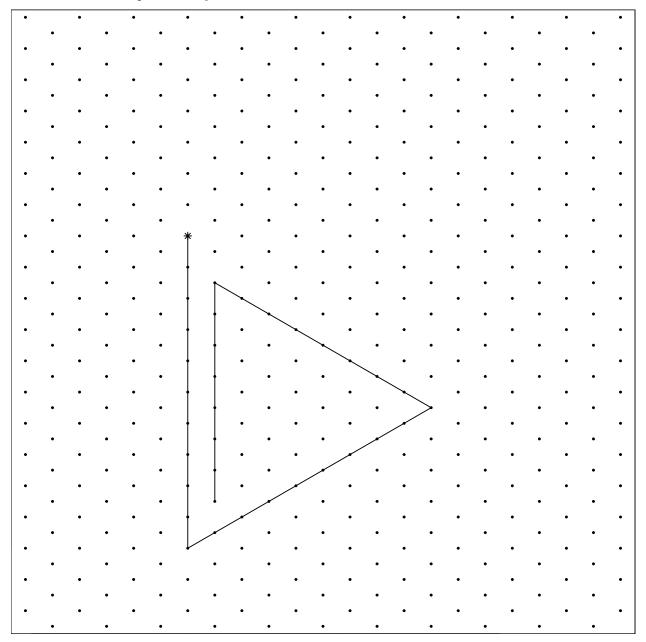
- $\bullet~$  Start at star, heading down.
- Repeatedly count backwards from 9 for distance.
- Turn  $90^{\circ}$  counterclockwise after each segment. Remember... Down, Right, Up, Left!



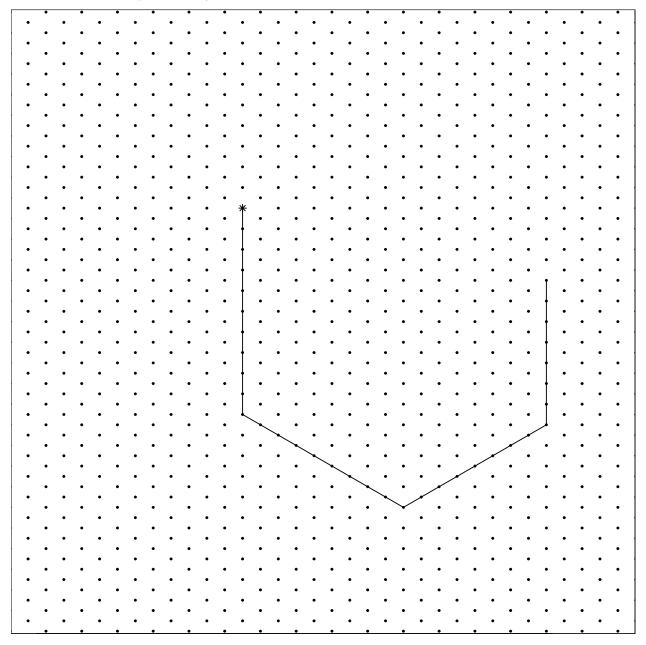
- $\bullet~$  Start at star, heading down.
- Repeatedly count backwards from 10 for distance.
- Turn  $90^{\circ}$  counterclockwise after each segment. Remember... Down, Right, Up, Left!

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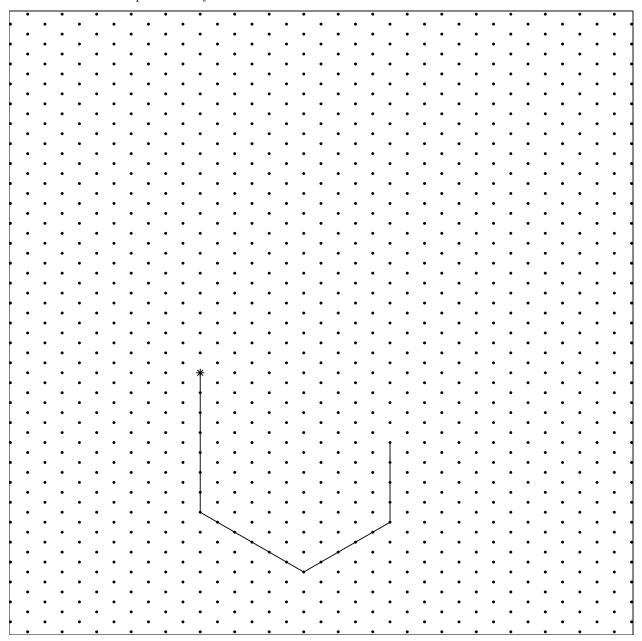
- Start at star heading down.
- Repeatedly count backwards from 10 for distance.
- Turn 120° counterclockwise after each segment.
  - 1. Down (South)
  - 2. Up-Right (Northeast)
  - 3. Up-Left (Northwest)
- I've started the pattern for you.

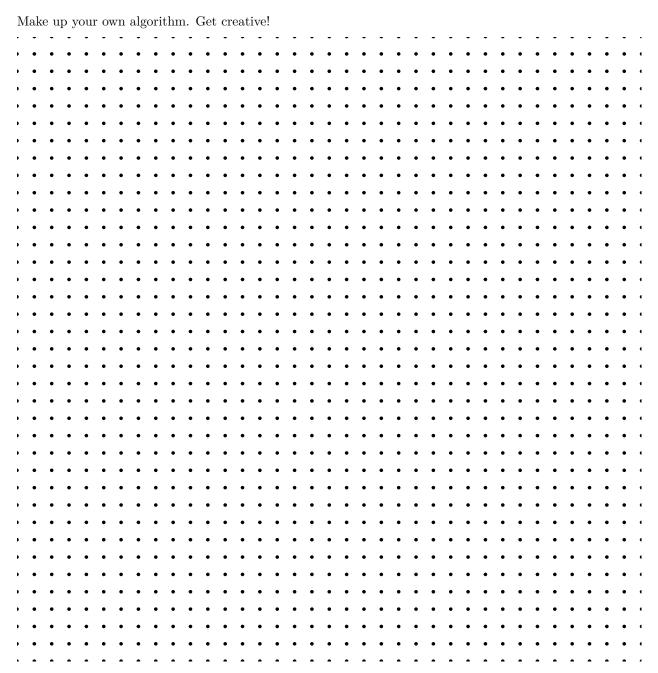


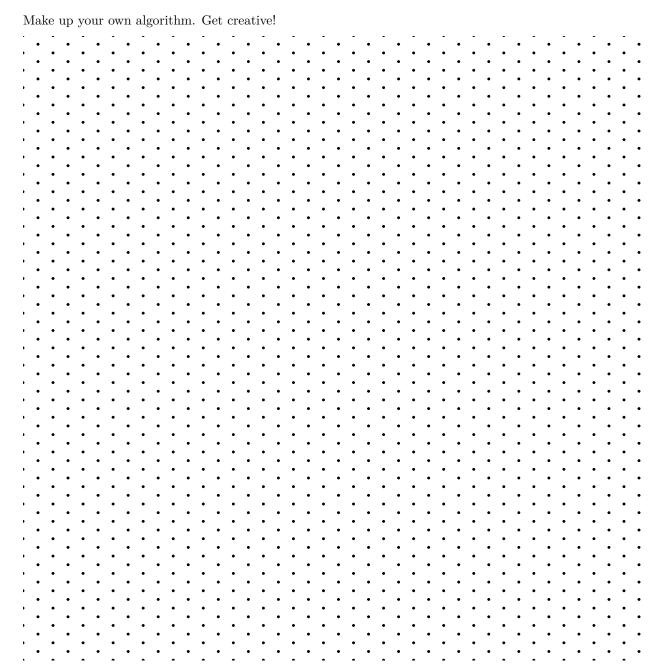
- $\bullet~$  Start at star, heading down.
- Repeatedly count backwards from 10 for distance.
- Turn 60° counterclockwise after each segment.
  - 1. S
  - 2. SE
  - 3. NE
  - 4. N
  - 5. NW
  - 6. SW
- I've started the pattern for you.



- Start at star, heading down.Repeatedly count backwards from 7 for distance.
- Turn 60° counterclockwise after each segment.
- ullet I've started the pattern for you.







Make up your own algorithm.	

Make up your own algorithm.	Get creative!